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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,945	09/24/2002	Christopher John Andrews	PPD 50449/ UST	4663

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EXAMINER

SWOPE, SHERIDAN

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/088,945	Applicant(s) ANDREWS ET AL.	
	Examiner Sheridan L. Swope	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22-24 and 26-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-20, 22-24 and 26-41 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Claims 1-20, 22-24, and 26-41 are pending.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, 2, and 26, drawn to an isolated glutathione-S transferase (GST) polypeptide.

Group II, claim(s) 3-5, 14, 28-30, 35, and 36, drawn to an isolated polynucleotide encoding a GST polypeptide.

Group III, claim(s) 6-9, 27, and 31, drawn to a polypeptide that catalyzes addition of β -alanine to γ -glutamylcysteine.

Group IV, claim(s) 10, 11, 32-34, 37, and 38, drawn to a polynucleotide encoding a polypeptide that catalyzes addition of β -alanine to γ -glutamylcysteine.

Group V, claim(s) 12, 13, 39, and 40, drawn to a DNA construct comprising a sequence encoding a fusion protein comprising GST and a polypeptide that catalyzes addition of β -alanine to γ -glutamylcysteine.

Group VI, claim(s) 15, 16, 19, and 24, drawn to a method of making a plant that is resistant to an agrochemical by inserting a polynucleotide encoding a GST polypeptide.

Group VII, claim(s) 17, 18, 20, drawn to a method of making a plant that is resistant to an agrochemical by inserting a polynucleotide encoding a polypeptide that catalyzes addition of β -alanine to γ -glutamylcysteine.

Group VIII, claim(s) 22, 23, and 41, drawn to a method of making a plant with an additionally desired trait using a transgenic plant having a polynucleotide encoding a GST polypeptide.

The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special

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technical feature for the following reasons: The technical feature linking Groups I-VIII appears to be that they all relate to enzyme-encoding polynucleotides used to produce transgenic plants that are resistant to herbicides. However, Shiota et al, 1994 teach a polynucleotide encoding a fused enzyme between rat cytochrome P4501A1 (CYP1A1) and yeast NADPH-cytochrome, which is used to produce herbicide-resistant tobacco plants. Therefore Groups I-VIII share no special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art. Furthermore, the products of Groups I-V do not share a special common structural or functional feature while, the methods of Groups VI-VIII do not use the same reagents or produce the same results. In addition, the methods of Groups VI-VIII do not comprise all of the methods for making or using the products of Groups I-V. Accordingly, Groups I-VIII are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

Searching more than one of Groups I- VIII would represent a burden on the Office for the following reasons.

The search of Group II would not encompass a search for Group I, which would include searching the prior art for teachings of the purified protein. In addition, a search for Group I, class 435, subclass 193, would not encompass a search for Invention II, class 530, subclass 350. Thus, a search of either Group I or II would not encompass a search for the other invention and searching both inventions would be a burden on the Office.

Likewise, the search of Group IV would not encompass a search for Group III, which would include searching the prior art for teachings of the purified protein. In addition, a search for Group III, class 435, subclass 193, would not encompass a search for Invention IV, class 530,

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subclass 350. Thus, a search of either Group III or IV would not encompass a search for the other invention and searching both inventions would be a burden on the Office.

A search for a method of Groups VI-VIII would not encompass a search for any other method because the methods do not share a special technical feature of steps and products used, or results produced. Thus, the search for any of Groups VI-VIII would not encompass the search for any other method invention and searching all said inventions, or a subset thereof, would be a burden on the Office.

A search for the polypeptide of Group I or III would not encompass a search for the methods of Group VI-VIII; therefore, a search of Group I or III with any of Group VI-VIII would be a burden on the Office.

A search for the polynucleotide of Group II or IV would not overlap a search for the methods of Group VI-VIII; therefore, searching Group II or IV with any of Group VI-VIII would be a burden on the Office.

Although Groups I and III have the same classification, class 435, subclass 193, a search for the polypeptide of Group I would not overlap a search for the polypeptide of Group III, since said polypeptides do not share a common structure and function. Thus, a search for both polypeptides would be a burden on the Office.

Although Groups II and IV have the same classification, class 530, subclass 350, a search for the polynucleotide of Group II would not overlap a search for the polynucleotide of Group IV, since said polynucleotides do not share a common structure and function. Thus, a search for both polynucleotides would be a burden on the Office.

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The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the Official Gazette notice dated March 26, 1996 (1184 O.G. 86; see also M.P.E.P. 821.04, *In re Ochiai*, and *In re Brouwer*). Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right, if the amendment is presented prior to final rejection or allowance, whichever is earlier. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. To be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan L. Swope whose telephone number is 571-272-0943. The examiner can normally be reached on M-F; 9:30-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy can be reached on 571-272-0928. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-872-9307 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Shirley F. Jones
AU 1652